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The Relationship between Parent Communication Orientations and the Self-Efficacy of Student-Athletes

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The Relationship between Parent Communication Orientations

and the Self-Efficacy of Student-Athletes

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Abstract

The influence of parent(s)/guardian(s) communication on a student-athlete's self-efficacy has received limited attention despite its potential implications for the athlete's sport performance. Student-athlete participants (N = 290) completed measures to report their level of self-efficacy along with the student-athlete perceptions of their parent(s)/guardian'(s) communication orientation. Further, efficacy-enhancing techniques were measured to report frequency-of-use and effectiveness as these strategies were administered by the parent(s)/guardian(s). Significant relationships were found between conformity- and conversation communication and a student-athlete's self-efficacy. However, these communication orientations did not interact to influence a student-athlete's self-efficacy. Mean scores are reported to demonstrate which efficacy-enhancing techniques are the most frequently used and effective. Lastly, communication orientations and efficacy-enhancing techniques are correlated. The study's limitations, implications, and directions for future research are discussed.

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Chapter 1

Introduction

Research indicates that self-efficacy has implications for performance in a variety of contexts such as music performance (McPherson & McCormick, 2006), organizational performance outcomes (Judge, Jackson, Shaw, Scott, & Rich, 2007), academic performance (Turner, Chandler, Heffer, 2009), employee performance (Walumbwa, Mayer, Wang, Wang, Workman, & Christensen, 2011), and sports (Moritz, Feltz, Fahrbach, & Mack, 2000). In consideration of these influences, research has sought to identify ways to increase an athlete's efficacy beliefs. Sport psychology literature has predominantly focused on the coach-athlete relationship when examining the positive association between self-efficacy and performance outcomes (Collins & Durand-Bush, 2014; Gould, Hodge, Peterson, & Giannini, 1989; Vargas-Tonsing, Myers, & Feltz, 2004), with special attention to the effects of coaching communication. Research provides evidence that an athlete's level of self-efficacy increases when coaches engage in autonomy-supportive communication (Mouratidis, Lens, & Vansteenkiste, 2010), provide constructive feedback, give praise for accomplishments, and set goals (Collins & Durand-Bush, 2014). Additionally, positive talk, a coach's confidence, and instruction drilling are among other techniques that increase self-efficacy (Gould et al., 1989; Vargas-Tonsing et al., 2004).

Although the coach-athlete relationship has received significant attention, the coach alone does not shape an athlete's experiences. The role of triangulation and the consequent implications of the coach/parent-athlete relationship on an athlete's sport performance (Hellstedt, 1987; Smith, Cumming, & Smoll, 2011) indicate that parent communication may also have

implications for an athlete's self-efficacy. Therefore, this study examines the influence of parent communication on an athlete's self-efficacy and the techniques parents utilize to enhance an athlete's efficacy beliefs. By extending the research on athletic social influences in this way, this study aims to further understanding of the parent-child relationship, and the effects of parent communication on a child's sport development and achievement. Given the importance of the coach-parent relationship, this research will help coaches and parents to recognize how their intermingled roles affect the athlete's performance (Smith, Cumming, & Smoll, 2011). The review begins with an overview of self-efficacy and its association to sport performance, with special attention to the efficacy-enhancing techniques utilized by coaches and parents. The next section reviews literature on parent communication patterns (conformity- and conversation-orientations) and their possible influences on an athlete's self-efficacy. Then, the results from a study conducted to test the hypotheses and address the research questions are discussed.

Chapter 2

Literature Review

Self-Efficacy

Self-efficacy is an individual's perceived ability to execute and control a particular task to attain a goal (Bandura, 1977; 1997; Feltz, Short, & Sullivan, 2008; Rodgers & Murray, 2007). Self-efficacy is rooted in Social Cognitive theory, which posits that individuals are proactive agents in the regulation of their cognition and action rather than simply passive reactors to their environment (Bandura, 1989; Feltz, Short, & Sullivan, 2008). Thus, an individual cognitively evaluates his or her environment to determine how it will influence his or her efficacy beliefs. In the context of sport performance, the environmental condition (e.g., coach/parent feedback) influences an athlete's self-efficacy, which then affects the athlete's performance behavior (e.g., effort) (Feltz, Short, & Sullivan, 2008). Such cognitive appraisals influence an individual's tendency to approach versus avoid various performance situations (Bandura, 1977) by affecting the individual's self-aiding or self-hindering thought patterns (Bandura, 1989). For example, an individual characterized by high levels of self-efficacy is more likely to approach challenging goals, cope with pain, and persevere through setbacks (Feltz, Short & Sullivan, 2008). Conversely, individuals with low self-efficacy are likely to avoid challenging goals, experience heightened levels of anxiety toward accruing injury, expend less effort, and give up due to fear of failure (Feltz, Short, & Sullivan, 2008).

Information Sources that Influence Efficacy Appraisals. Bandura (1977, 1997) constructed Self-Efficacy theory to outline four sources of information that control an individual's cognitive appraisal of his or her efficacy beliefs. *Mastery experience* is defined as an individual's performance accomplishments (Bandura, 1977; 1997; Feltz & Lirgg, 2001). These

achievements refer to conquering a difficult or previously feared task (Bandura, 1977; 1997). Upon accomplishment of a difficult or feared task, self-efficacy beliefs will increase (Feltz & Lirgg, 2001). If an individual repeatedly perceived his or her past sporting experiences as successful, self-efficacy beliefs are likely to increase (Feltz, Short, Sullivan, 2008). Conversely, if an athlete perceived these experiences as failures, the efficacy beliefs are susceptible to decrease.

Given the cognitive framework of self-efficacy, an individual's mastery experience is not only influenced by the perceived difficulty of the task, but, also an athlete's cognitive appraisal of the amount of guidance received, the effort expended, and whether the athlete perceives that the task required a skill that can be acquired versus an inaptitude toward the sport (Feltz, Short, Sullivan, 2008). Bandura (1997) states that athletes will likely experience positive associations with self-efficacy when a performance is difficult, attempted without assistance from others, and likely to result in a success. Conversely, athletes are likely to experience lower levels of efficacy beliefs if the task is appraised as easy, executed with the assistance of others, and has resulted in past failures (Feltz, Short, & Sullivan, 2008). Feltz and colleagues (2008) suggest that coaches should intentionally place athletes in performance situations that will promote their chances for repeated successes, refraining from putting the athlete in overly challenging activities that could prompt failures. Implementing this recommendation would facilitate stronger efficacy expectations from repeated successes, in turn, decreasing the impact of the occasional failure (Bandura, 1977). This same suggestion holds possible implications when transferred into the realm of parent-athlete interactions. For example, per the direction of Bandura (1997), increases in an athlete's self-efficacy will manifest if the parent registers the athlete into an adequately challenging sport program and refrains from excessively providing specific sport technical

assistance. Conversely, decreases in self-efficacy will occur if the parent registers the athlete into a sport program where the athlete appraises the sport as easy and parental assistance is excessively used to develop the athlete's sport relevant tasks.

Vicarious experiences are founded on social comparison (Bandura, 1977; 1997). For example, when an individual observes a similar individual succeed at a particular task, the observer then raises his or her self-efficacy beliefs that he or she, too, can obtain that level of success, in turn, making the individual more likely to approach similar performance opportunities (Bandura, 1977; Feltz & Lirgg, 2001). Additionally, an athlete can observe a coach repeatedly demonstrate the mechanics of shooting a basketball and apply that instructional information to his or her aptitude in the sport (Feltz, Short, & Sullivan, 2008). Thus, a coach needs to be considerate of the type of instructional communication he or she administers. In regards to the parent-athlete relationship, implications for similar recommendations are possible. For example, as an athlete observes his or her parent repeatedly demonstrate an athletic task, the parent's form of instructional communication has the potential to influence the athlete's tendency to approach or avoid similar opportunities. Furthermore, when the parent shows competency toward sport-relevant tasks, the athlete is likely to apply the parent-athlete similarity to his or her aptitude in the sport (e.g. "My parent is good at the particular task; thus, I should be good at this task, as well.").

When compared to mastery experience, vicarious experiences have been demonstrated with weaker associations to performance; however, it still suggests benefits in enhancing an individual's efficacy beliefs. For example, when an athlete lacks personal information about his or her self-efficacy, he or she is likely to gather information on similar others (e.g. coaches, parents, teammates, opponents). Given its roots in Social Cognitive theory, people naturally seek

out similar others in order to apply the compared other's characteristics and attribute them to the athlete's own capabilities (Feltz, Short, & Sullivan, 2008). Thus, though vicarious influences may not have the most dominant influence on self-efficacy, it plays an important role in an athlete's evaluation of his or her self-efficacy beliefs.

Social persuasion uses communication to reinforce progress toward reaching a goal (Bandura, 1977; Dishman & Chambliss, 2013). This source of efficacy information utilizes interpersonal and intrapersonal communication. For example, interpersonal interactions via evaluative feedback, suggestions, and expectations by others (Bandura, 1977; 1997) influence how an individual intrapersonally appraises the interaction's content. Dependent upon how the individual perceives the evaluative feedback, suggestions, and expectations by others will determine the intrapersonal effects administered via the individual's self-talk, positive or negative imagery, and other cognitive strategies (Bandura, 1977; Feltz & Lirgg, 2001). Positive forms of verbal persuasion (e.g. the coach highlighting the athlete's task-relevant progress; the coach encouraging the athlete to measure his or her successes via self-improvements) associate with self-aiding thought patterns that direct the individual to approach various performance opportunities (Bandura, 1977, 1989, 1997) and increase self-efficacy (Feltz, Short, & Sullivan, 2008). However, it is the strength of the social persuader that will determine the magnitude of the verbally persuasive content. For example, the magnitude of persuasion will depend on the communicator's prestige, credibility, trustworthiness, and expertise (Feltz, Short, & Sullivan, 2008). If the persuader is lacking in these areas, the verbally persuasive communication is less likely to affect the athlete's efficacy beliefs. Additionally, a coach's feedback that accentuates the athlete's progress increases efficacy beliefs whereas feedback focused on the athlete's shortcomings decreases the athlete's self-efficacy (Feltz, Short, & Sullivan, 2008). That is,

athletes tend to avoid performance situations if the coach provides negative feedback as opposed to positive.

Per the suggestion of Feltz and her colleagues (2008), coaches should be aware of the type of verbal persuasion they employ given that positive forms of verbal persuasion demonstrate increases in efficacy beliefs where negative verbal persuasion (e.g. the coach focusing on the athlete's shortcomings or attributing the athlete's failures to a lack of ability rather than effort) demonstrate decreases in self-efficacy. This recommendation provides potential similar implications when explored within parent-athlete interactions. For example, if a parent utilizes positive forms of communication via highlighting task relevant progress and attributing the athlete's successes to self-improvements, then the athlete is likely to increase his or her self-efficacy. Conversely, if the parent implements negative verbal persuasion via promoting the athlete's shortcomings and lack of ability rather than effort, the athlete is likely to decrease his or her efficacy beliefs.

Physiological and emotional states refers to the roles of physical strength, stamina, and positive moods in enhancing an individual's self-efficacy (Bandura, 1977; Feltz & Lirgg, 2001; Feltz, Short, & Sullivan, 2008). Athletes negatively or positively appraise their emotional states, which are signaled via physiological arousal. When athletes associate the physiological arousal with anxiety, they might conclude that they lack the capabilities to successfully execute a particular task. Athletes who contribute anxiety to feeling ready and psyched up for performance, however, would draw positive conclusions about their ability to execute the task (Feltz, Short, & Sullivan, 2008). Additionally, the emotional states of happiness, exhilaration, and tranquility are more likely to positively affect efficacy beliefs whereas sad, anxious and depressed moods are likely to decrease efficacy beliefs (Feltz, Short, & Sullivan, 2008). If an individual is subject to

prolonged exposure to aversive situations without relief, the individual is susceptible to avoidance behaviors toward performance opportunities (Bandura, 1977). This literature (Feltz, Short & Sullivan, 2008) recommends for coaches to help direct the athlete's appraisal of the performance situation to promote the positive effects (e.g. happiness, exhilaration, and tranquility) associated with an athlete's strength, stamina, and emotional moods. This can be accomplished via the coach directing the athlete's attention to the positive effects of the physiological arousal (e.g. contributing anxiety to feelings of readiness and excitement for the performance), providing that similar outcomes might manifest within the parent-athlete relationship. For example, if the parent, too, directs the athlete's attention to the positive effects of physiological arousal, the athlete will likely approach various performance opportunities rather than avoid them.

The relational factors that influence an athlete's cognitive appraisal of mastery and vicarious experiences, social persuasion, and physiological and emotional states make their influences on efficacy beliefs important to sport performance. Research suggests that an individual's mastery experience is the most reliable guide to gauge self-efficacy while the other elements are liable to change within differing context (Bandura, 1977; 1997; Schunck & Meece, 2005). It should be noted that the effects of these elements do not occur automatically; rather, the individual must cognitively appraise, given a particular relational communication environment, the data from the four sources of information (Schunk & Meece, 2005). Thus, an individual measures these four sources along three dimensions: level, strength, and generality (Bandura, 1997; Feltz, Short, & Sullivan, 2008). *Level* of self-efficacy refers to the individual's expected performance on various levels of difficulty (e.g. a basketball player to judge how many shots, given 10, they can make consecutively) (Feltz, Short, & Sullivan, 2008). *Strength* of self-efficacy

is characterized by the individual's level of certainty to attain the difficult task (e.g. the basketball player's certainty that he or she will make 10/10 shots) (Feltz, Short, & Sullivan, 2008). *Generality* of self-efficacy refers to the number of situations in which an individual's efficacy judgments can transfer between domains (e.g. the basketball player's level and strength of self-efficacy are consistent across contextual domains) (Feltz, Short, & Sullivan, 2008). The total measure of an individual's self-efficacy will determine if they will persist through a task by continuously approaching its challenges (Feltz, Short, & Sullivan, 2008). However, the individual's assessment of the relational communication from the four sources of self-efficacy influences how an individual measures his or her efficacy beliefs across the three dimensions (Bandura, 1997; Feltz, Short, & Sullivan, 2008). The following section establishes an association between interpersonal communication and self-efficacy, then discusses efficacy-enhancing techniques.

Communicative Influences on Self-Efficacy

Examinations of relational influences on sport performance have predominately focused on the influence of the coach-athlete relationship. Specifically, the act of encouraging positive talk via supportive comments has been evaluated as one of the most frequently used and effective forms of communication positively associated with self-efficacy (Vargas-Tonsing et al., 2004). Furthermore, a coach's pre-game communication has been examined from the perspective of the athlete (Vargas-Tonsing, 2009). Results suggest that athletes prefer instructional pre-game communication rather than emotionally charged content (Vargas-Tonsing, 2009). When instructional feedback was administered, there was a positive association between the pre-game speech and the athlete's self-efficacy. No significant relationship was found between emotionally charged pre-game communication and self-efficacy beliefs (Vargas-Tonsing, 2009).

In the context of losing a competition and/or making a mistake in training, Sagar and Jowett's (2012) research indicates that a coach's expression of negative emotions (e.g. anger, disappointment), hostile reactions (e.g. aggression, blame), and punitive behaviors (e.g. threats, punishment) demonstrated detrimental effects on an athlete's level of sport competency. Furthermore, Mora and colleagues' (2009) research found that when coaches implemented negative criticisms to athletes with intentions to eliminate errors and correct mistakes, the athlete's self-efficacy and motivation decreased (Mora, Cruz, & Torregros, 2009). It is reasonable that similar implications may be observed in parent-athlete communication such that a parent's negative and unsupportive communication decreases an athlete's self-efficacy while that which is instructional and constructive yields benefits to self-efficacy beliefs.

Further research offers insight into the influences of persuasive communication. Ashford and colleagues (2010) found a negative association between verbally persuasive techniques used by coaches to enhance self-efficacy, stating that verbal persuasion alone has limited power to create an enduring increase in an athlete's self-efficacy beliefs (Ashford, Edmunds, & French, 2010). Recent research suggests that persuasion combined with social comparison interventions (e.g. providing the participants with behavior modeling and role models) is positively associated with increases in self-efficacy (Zagorska & Guszkowska, 2014). Other communication research indicates that autonomy-supportive feedback (e.g. "My coach gives a meaningful reason why he says this") via empathy support, acknowledgement of feelings and need-supporting nonverbal behavior is positively associated with an athlete's persistence, autonomous motivation, and well-being (Mouratidis et al., 2010).

Likewise, subsequent investigations of autonomy-supportive and controlling coach communication demonstrated that autonomy-supportive interactions (e.g. "I feel my coach

provides me choices and opinions;" "I feel understood by my coach") positively predicts fulfillment of basic psychological needs (autonomy, competence, relatedness) (Felton & Jowett, 2012). When these needs are satisfied, the athlete experiences increases in growth, integrity, and well-being (Deci & Ryan, 2000). Conversely, controlling communication (e.g. "My coach shouts at me in front of others to make me do certain things;" My coach tries to control what I do during my free time") negatively predicts the fulfillment of the basic psychological needs (Felton & Jowett, 2012). Additionally, results from case studies of Norwegian elite athletes suggest that breakdowns in communication (e.g. lack of communication, miscommunication) negatively affect an athlete's sport development and motivation to approach various training tasks (Kristiansen, Tomten, Hanstad, & Roberts, 2012). Overall, a coach's supportive communication has continuously demonstrated increases in an athlete's self-efficacy, whereas controlling communication suggests decreases. The aforementioned research provides implications for this association in other relational communication environments, more specifically, the realm of the parent-athlete relationship. Next, efficacy-enhancing techniques will be summarized, leading into the first set of research questions.

Efficacy Enhancing Techniques in the Context of Sport. Taken from the research of Feltz and Doyle (1981) and Feltz and Weiss (1982), Gould and colleagues (1989) examined the 13 dominant strategies that coaches can use to enhance self-efficacy. The strategies identified in the mastery experience domain that enhanced an athlete's efficacy beliefs included a coach attributing failure to lack of effort rather than to low ability, employing hard physical conditioning, and setting specific goals. Within the source of vicarious experience, efficacy-enhancing strategies included coaches demonstrating performance accomplishments via good instruction and modeling confidence themselves. Coaches who emphasize improvements in

technique or process to overcome, uses of reward statements, verbally persuades others, and encourages positive talk were among the efficacy-enhancing techniques that promoted increases in perceived capabilities. Lastly, a coach helping an athlete to reduce anxiety via relaxation training, emphasizing that feelings of anxiety indicate readiness rather than fear, and using imagery to visualize performance success was also positively association with increased levels of sport competence (Feltz & Doyle, 1981; Feltz & Weiss, 1982; Gould et al., 1989).

These 13 dominant strategies were then evaluated from the coach's perspective to determine their frequency-of-use and effectiveness. Among the strategies, enhancing performance through instruction drilling, the coach's self-confidence, encouraging positive talk, and employing hard physical conditioning were among the most frequently used and effective strategies reported by coaches (Gould, Hodge, Peterson, & Giannini, 1989). Research by Weinberg and Jackson (1990) and Weinberg, Grove and Jackson (1992) extended the efficacy-enhancing research through their examination of verbally persuasive messages, which revealed that persuasive messages are among the most frequently used and effective in enhancing an athlete's efficacy beliefs. Additionally, Tremayne and Tremayne's (2004) research furthered understanding of efficacy- enhancing techniques by identifying three additional effective strategies: setting specific goals, imagining success, and reducing the athlete's anxiety via relaxation training (Tremayne & Tremayne, 2004).

Given the aforementioned research, examined from the perspective of the coach, Vargas-Tonsing and colleagues (2004) explored the 13 efficacy-enhancing techniques through the lens of the athlete. Their research asked athletes to evaluate their coaches on two scales: (1) how frequently the coach uses the aforementioned strategies, and (2) how effective the techniques were toward enhancing the athlete's efficacy beliefs (Vargas-Tonsing. Myers, & Feltz, 2004).

Athletes reported that coaches most frequently use self-confidence, instruction drilling, and setting specific performance goals. The most effective techniques in enhancing an athlete's efficacy beliefs were a coach's use of encouraging positive talk, displays of self-confidence, and instruction drilling (Vargas-Tonsing et al., 2004). Research examining the source of emotional state effects on efficacy indicate that instructional pre-game speeches can increase an athlete's self-efficacy while no significant associations resulted from emotionally charged pre-game speeches (Vargas-Tonsing, 2009).

As efficacy-enhancing techniques have been steadily researched to promote practical application within the coach-athlete relationship literature, there has been limited research on the influence of parents on enhancing an athlete's self-efficacy. The development that occurs from infancy through adolescence is when the influential role of the parent is paramount (Chicchetti & Beeghly, 1990). In the context of sport, an athlete's development is also susceptible to parental influence. This is evident in parental actions pertaining to their involvement in the athlete's sport, providing specific and immediate feedback, and their orientation toward positive versus negative communication with the athlete (Fredricks & Eccles, 2004; Holt, Tamminen, Black, Mandigo, & Fox, 2009). Research supports the importance of the parent relationship to an adolescent's life; thus, it is important to extend the efficacy-enhancing research into the realm of the parent-athlete relationship.

The following section outlines the parent communication literature. Given the aforementioned literature on self-efficacy, predications of the associations between various parent communication orientations and an athlete's self-efficacy are offered. Following, research questions will be posed to extend the aforementioned self-efficacy enhancing technique research into the relational realm of parent-athlete.

Parent Communication

McLeod & Chaffee (1972) extended Newcomb's (1953) communication model to develop two communication dimensions. Newcomb's (1953) model assumes an A-B-X paradigm in which *A* represents the parent, *B* constitutes the child, and *X* is deemed the topic of conversation.

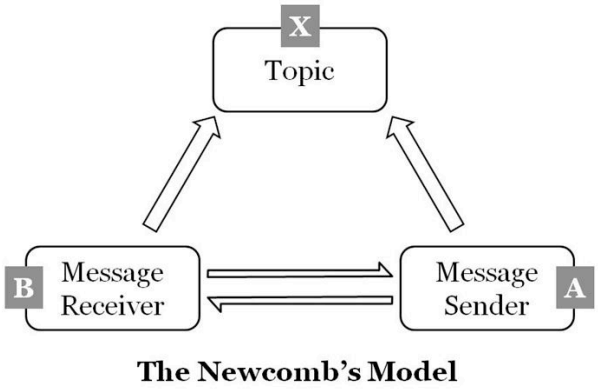

Figure 1. Newcomb's (1953) Communication Model

McLeod and Chaffee (1972) identified two dimensions, which determine the influential direction of communication as seen in Newcomb's model (1953). A *socio-oriented* family encourages allegiance to parents while the parent attempts to control the child's learning environment (McLeod & Chaffee, 1972). Conversely, a *concept-oriented* family supports a child's autonomous development via his/her preferred behaviors (McLeod & Chaffee, 1972). Ritchie and Fitzpatrick (1990) reconceptualized McLeod & Chaffee's (1972) socio- and concept-oriented dimensions to focus on the unique communicative behaviors within each orientation. Socio-oriented was reconceptualized into the *conformity* communication orientation while

concept-oriented was newly defined as the *conversation* communication orientation (Ritchie & Fitzpatrick, 1990).

Conformity- and Conversation-Oriented Communication. *Conformity-oriented* communication reflects a family structure that interacts less frequently on a variety of topics, including private thoughts, feelings and activities while employing more aggressive behaviors (Koerner & Fitzpatrick, 2002a). Additionally, conformity-oriented parents partake in uni-directional forms of communication (e.g. parent tells the child how to act/what to believe) to promote uniformity of thinking among the family structure (Ritchie & Fitzpatrick, 1990). This dimension of parent communication emphasizes a dominant A-B relationship as seen in Newcomb's (1953) communication model. A child deriving from this family structure might be prone to repress various views on social norms and values. Ultimately, the child is not encouraged to argue with the parent's beliefs on any particular topic (Koerner & Fitzpatrick, 2002a; McLeod & Chaffee, 1972).

Conversely, *conversation-oriented* communication supports freedom within intra-family interactions via sharing ideas, expressing concerns, and participating in decision-making (Koerner & Fitzpatrick, 2002a). Additionally, conversation-oriented parents partake in open communication and are more likely to predict a harmonious environment where children feel safe to express various views and opinions (Koerner & Fitspatrick, 2002a). This communication uses bi-directional forms of communication (e.g. parent listens to the child's beliefs while abstaining from the tendency to control the child's thought process) (Ritchie & Fitzpatrick, 1990). Referencing Newcomb's (1985) communication model, conversation-oriented communication emphasizes an A-X relationships. For example, a parent might help direct the child's thought process by providing them with alternative perspectives on a particular topic;

however, conversation-oriented parents typically refrain from trying to control their child's thoughts (Koerner & Kitzpatrick, 2002a; Moschis, 1985).

Types of Family Communication Orientation. The influences of conformity and conversation-orientations are further evident when examining how these dimensions interact with one another (Koerner & Fitzpatrick, 2004). A family's communication orientation is dependent upon the degree in which a family encompasses conformity versus conversation communicative tendencies. The combinations of high versus low conformity and conversation communicative tendencies reflect four family types: laissez-faire, protective, pluralistic, and consensual (McLeod & Chaffee, 1972).

The *laissez-faire* family exemplifies the least amount of parent-child communication; thus, this type of family does not emphasize either conformity- or conversation-orientation dimension (Koerner & Fitzpatrick, 2004; McLeod & Chaffee, 1972). Parents within a laissez-faire family assign less value to the art of communication with their child (Koerner & Fitzpatrick, 2004). Children coming from this family type typically do not receive much support while having to make their own decisions (Koerner & Fitzpatrick, 2004). *Protective* families demand compliance and harmony among the family values and beliefs (McLeod & Chaffee, 1972). This type of family communication pattern demonstrates characteristics high in conformity communication with low levels of conversation-oriented communication (Koerner & Fitzpatrick, 2004; McLeod & Chaffee, 1972). Parents within the protective family have little concern for open communication (Koerner & Fitzpatrick, 1997). Children from this family type learn that conversations within the family structures are not valued which leads to the child distrusting his or her own decision-making skills (Koerner & Fitzpatrick, 2004). An athlete deriving from this family type suggests possible implications considering the athlete's

susceptibility to low level of self-confidence, which could possibly have negative effect on an athlete's self-efficacy.

Furthermore, *pluralistic* families support the autonomous development of the child's skills and competencies without demanding conformity to family's values and beliefs (McLeod & Chaffee, 1972). This type of family communication pattern demonstrates higher levels of conversation orientation with lower levels of conformity orientation (Koerner & Fitzpatrick, 2004). Characteristics of this family communication style are defined as openness in communication while parents simultaneously abstain from controlling their child in the decision-making process (Koerner & Fitzpatrick, 2004). Children from the pluralistic family are socialized to value intra-family interactions while fostering communication competence and confidence in their skill in order to make autonomous decisions (Koerner & Fitzpatrick, 2004). Given the level of confidence a child might develop within a pluralistic family, implications can be made toward the positive association of this family type with an athlete's self-efficacy. Lastly, *consensual* families are both high in conversation- and conformity-oriented communication (Koerner & Fitzpatrick, 2004). This communication pattern encourages the child's autonomous values and beliefs while simultaneously reinforcing the family's internal harmony and hierarchy (McLeod & Chaffee, 1972). Parent-child communication consists of high levels of listening with the intent to understand the child's view while also communicating the reasoning, beliefs, and values of the parents' decisions (Koerner & Fitzpatrick, 2004).

Conformity- and Conversation-Orientations and Child Socialization. Within the child socialization literature, a parent's tendency toward more conformity- or conversation-orientations has demonstrated various results given the particular context (Rollins & Thomas, 1979). For example, in regards to a child's mental health, conversation-oriented parent

communication was positively associated with the child's well-being via parental confirmation and affection (e.g. acknowledging the child's feelings, asking the child's opinion, attending child's extracurricular activities, active listening when the child is speaking) (Schrodt, Ledbetter, Ohrt, 2007). Furthermore, research demonstrates that conversation-oriented parent communication has positive implications for their child's relational experiences in friendships (Ledbetter, 2009). Specifically, the relational closeness experienced in friendship is positively related to conversation-orientation communication and negatively associated with conformity-oriented communication (Ledbetter, 2009). Thus, a conversation-oriented parent is more likely to encourage and support his or her child's face-to-face and online interactions with his or her friends to increase relational maintenance (Ledbetter, 2009).

Furthermore, interpersonal interactions within the family show variations between conversation- and conformity-oriented communication dependent upon the topic of the parent-child interactions (Baxter & Akkoor, 2011; Ritchie & Fitzpatrick, 1990). Topics of friendship and daily activities were higher in the conversation-orientation, in so much, that the dialogue between parent and child was more open and supportive (Baxter & Akkoor, 2011). In contrast, topics about sexual issues, the use of substances (e.g., alcohol, drugs, tobacco), money and education were related to conformity-oriented communication patterns (e.g. parent initiated interactions did not welcome open communication for the diverse opinions of the child) (Baxter & Akkoor, 2011). Implications from these findings suggest that the type of parent communication orientation employed might determine its effect on self-efficacy given the topic of conversation (the athlete's past experiences, future goals, the athlete's relationship with other team members, etc.).

Given the aforementioned literature on the effects of parent communication in various contexts, the influences of these family communication patterns have not been examined in the realm of sport communicative interactions. Previous research reveals an association between controlling parental communication and negative outcomes like aggression, delinquency, and substance abuse (Holmbeck, Paikoff, & Brooks-Gunn, 1995), whereas, autonomy-supportive parental communication has been associated with more achievement outcomes (Holmbeck et al., 1995). These results may provide similar implications when investigating the effects of family communication patterns on an athlete's self-efficacy.

Conformity- and Conversation-Orientations and Athlete Self-Efficacy. Although previous research has not examined the influences of conformity- and conversation-orientations on an athlete's efficacy beliefs, the effects of dimensions of similarly characterized forms of parent communication have been examined. Research on the parent-athlete relationship has focused on what constitutes supportive (e.g., conversation-orientation) versus controlling (conformity-orientation) comments and how it affects performance. Holt and colleagues (2008) provided evidence for various supportive family communication, defined as praise and encouragement (e.g. "Good effort!" "Go get it next time." "Good hustle."). Conversely, an individual deriving from a controlling family atmosphere is less likely to form an individual identity (Koerner & Fitzpatrick, 2002a). Controlling comments consisted of parent instruction (e.g. "Play your side," "Mark her!" "Shoot.") and negative comments (e.g. "What the hell was that?" "You're supposed to run, not walk."). Additionally, high levels of praise and understanding from the parent are linked to an athlete's successful sport development and performance (Wuerth, Lee, Alferman, 2004).

More recent research demonstrates that higher levels of parental control (e.g. invalidating feelings, constraining verbal expression, personal attack, and love withdrawals) negatively affect an emerging adult's self-efficacy (Givertz & Segrin, 2012). Conversely, parents and their young adult children were most satisfied with the family environment when positive communication (e.g. empathic, attentive listening, speaking for oneself and not others, and staying on topic) was present (Givertz & Segrin, 2012). Advancing the literature, Gershgoren and colleagues (2011) outlined the effects of two differing parent communication styles: task-involved and ego-involved communication. A task-involved parent communicates task-oriented cues to his or her athlete. For example, the parent is focused on the athlete improving the penalty kick (task-relevant to sport) (Gershgoren, Tenenbaum, Gershgoren, & Eklund, 2011). Conversely, the ego-involved parent communication is focused on the athlete's ability to score more penalty kicks than other athletes (outcome-oriented to sport) (Gershgoren et al., 2011). Their research suggests a parent's level of task-involved communication is positively associated with an athlete's performance whereas a parent's ego-involved communication has a negative impact (Gershgoren et al., 2011). Therefore, the following are offered:

H1: Conversation-oriented parent communication is positively associated with an athlete's self-efficacy.

H2: Conformity-oriented parent communication is negatively associated with an athlete's self-efficacy.

RQ1: Do conformity- and conversation-orientations interact to influence an athlete's self-efficacy?

Lastly, the following research question extend the self-efficacy enhancing technique research into the relational realm of parent-athlete and investigates the association between parent communication orientations and efficacy-enhancing techniques:

RQ2: What efficacy-enhancing techniques are most frequently used by parents?

RQ3: What efficacy-enhancing techniques administered by parents do athletes perceive as most effective?

RQ4: Is there an association between conformity- and conversation-orientated parent communication and their use of efficacy-enhancing techniques?

Chapter 3

Methods

Procedures

Upon receiving Institutional Review Board approval, an online survey was distributed to coaches at Southeastern collegiate institutions to forward to student-athletes. Participants were recruited via email permission from the teams' head coaches using contact information provided on the institution website. The lead researcher electronically distributed the questionnaires to the coaches to distribute to their student-athletes. Participants who choose to partake in the survey completed a questionnaire measuring their family's communication orientation (i.e., conversation- and conformity-orientation). In addition, participants completed measures assessing their self-efficacy beliefs and the frequency and effectiveness of their parent(s)'/guardian(s)' use of efficacy-enhancing techniques. Lastly, the participants were asked to provide demographic information. Participation in the survey was voluntary with no penalty for early termination of the questionnaire.

Participants

Student-athletes at Southeastern collegiate institutions were recruited to participate in this study. A total of 620 participants began the questionnaire with 248 responses being dropped from the analysis due to incomplete survey participation. Of the 372 remaining student-athlete responses, 290 were analyzed in this study. The responses of the 290 participants who identified as student-athletes and were older than 18 years old were analyzed in this study. The questionnaires that were dropped from analysis were due to missing data and participants specifying that they were not current student-athletes.

The sample was overwhelming female at 79.7%% (n = 231) and males 19.3% (n = 56). Age ranged from 18 to 24, with the average age being 19.9 years (SD = 1.32). Caucasians dominantly represented the sample's demographic at 83.4% (n = 242). The sample also included African-American 3.8% (n = 11), Native American 0.7% (n = 2), Asian American 1% (n = 3), Hispanic 5.9% (n = 17), Pacific Islander 0.3% (n = 1). A total of 4.8% (n = 14) identified as "Mixed" or "Other" reporting Caucasian/British, Caucasian/Asian, African American/Caucasian, Caucasian/Pacific Islander, Hispanic/Caucasian, Chinese/Caucasian, Israeli and European.

Sport Categories. The sports with the most significant participants were 18% Soccer (n = 53), 13.2% Softball (n = 39), 11.9% Track & Field (n = 35), 10.8% Golf (n = 32). The remaining that were reported are as follows: 3.1% Baseball (n = 9), 5.4% Basketball (n = 16), 5.1% Cross-Country (n = 15), 0.7% Football (n = 2), 6.8% Swimming (n = 20), 5.4% Tennis (n = 16), 7.8% Volleyball (n = 23), 25.5% Other (n = 75). The following is a list of other sports reported: Bowling (n = 1), Cheerleading (n = 1), Diving (n = 5), Equestrian (n = 2), Fencing (n = 1), Field Hockey (n = 23), Hunter/Jumper (n = 1), Lacrosse (n = 22), Rifle (n = 4), Rowing (n = 8), Rugby (n = 1), Sand Volleyball (n = 1).

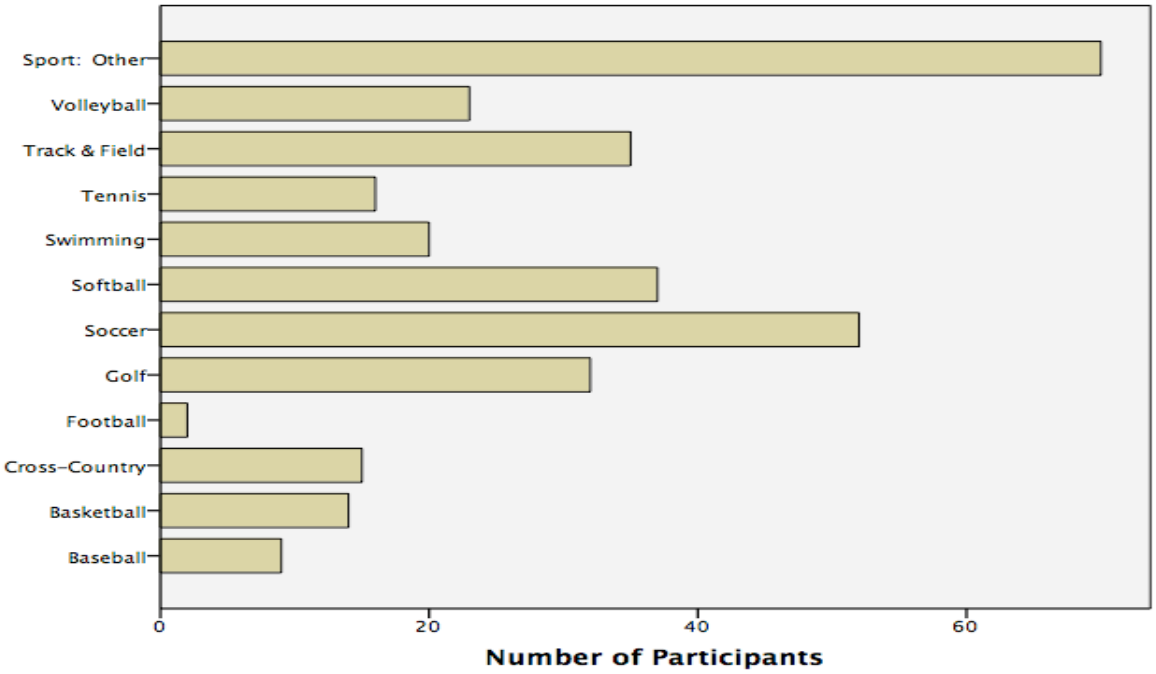

Figure 2. Sport Categories

Proximity. Given the proximity of the parent(s)/guardian(s) to the student-athlete's institution, 12.4% (*n* = 36) reported being less than an hour drive, 33.4% (*n* = 97) reported a 1-3 hour drive, 16.6% (*n* = 48) reported a 3-6 hour drive, 9.3% (*n* = 27) reported a 6-10 hour drive, and 28.3% (*n* = 82) reported a 10+ hour drive between the parent(s)/guardian(s) and the athlete's performance institution.

Division. Regarding the division of the athletic institution, 12.1% (*n* = 35) reported playing Division I, 17.6% (*n* = 51) Division II, and 20% (*n* = 58) reported playing Division III.

In-state versus Out-of-state. The sample reported to be 44.8% percent (*n* = 130) in-state student-athletes versus 55.2% (*n* = 160) out-of-state.

Scholarship. The participants reported 17.2% (*n* = 50) receiving full scholarship from their athletic institution, 39.7% (*n* = 115) receiving partial scholarship, 43.1% (*n* = 125) receiving no scholarship.

Measures

Family Communication Orientation. To measure conversation- and conformity-orientation, the Revised Family Communication Pattern (RFCP) (Fitzpatrick & Ritchie, 1994, Ritchie, 1991; Ritchie & Fitzpatrick, 1990) was distributed. The RFCP is based on McLeod and Chaffee's (1972) Family Communication Pattern (FCP) instrument, but scrutinizes the actual communication that occurs between parent(s)/guardian(s) and their children (Koerner & Fitzpatrick, 2002b). The RFCP is a self-reported questionnaire asking respondents to agree or disagree via a 5-point, Likert-type scale with a total of 26 statements about their family's communication. The RFCP questions were adapted to reflect a student-athlete's sport performance. The intent of the original questions were not changed. Sample items representative of the 15 conversation-orientation statements are as follows: "My parent(s)/guardian(s) encourage me to challenge their ideas and beliefs;" "With my parent(s)/guardian(s), I often talk about my plans and hope for the future." Sample items representative of the 11 conformity-orientation statements are as follows: "My parent(s)/guardian(s) sometimes become irritated with my views if they are different from theirs;" "My parent(s)/guardian(s) often say things like, 'You'll know better when you grow up.'" Conversation-oriented communication scores range from 15 to 75. Conformity-oriented communication scores range from 11 to 55. The conversation-orientation ($\alpha = .92$, $M = 58.61$, $SD = 10.49$) and conformity-orientation ($\alpha = .93$, $M = 22.33$, $SD = 9.11$) were reliable.

Self-Efficacy. An adapted version of the General Self-Efficacy (GSE) scale (Sherer et al., 1982) was used to measure student-athletes' beliefs about their capabilities to perform their specific sport. The GSE is a self-report questionnaire asking respondents to agree or disagree on a 5-point, Likert-type scale with a total of 17 statements about the student-athlete's self-efficacy.

The GSE questions were adapted to reflect the student-athlete's sport performance. The intent of the original questions were not changed. The following are sample statements: "When I make sport performance plans, I am certain I can make them work;" "One of my sport performance problems is that I cannot get down to work when I should." GSE scores range from 17 to 85. The GSE ($\alpha = .88$, $M = 68.74$, $SD = 8.44$) scale was reliable.

Efficacy-Enhancing Techniques. Extending the literature of Gould et al. (1989) and Vargas-Tonsing et al. (2004), the same measure used by Gould and his colleagues (1989) was adapted for use to assess the efficacy-enhancing techniques of that of parent(s)/guardian(s). The questionnaire is composed of 13 strategies (e.g. "My parent(s)/guardian(s) encourages positive talk;" "My parent(s)/guardian(s) helps me set specific goals;" "My parent(s)/guardian(s) identify similar athletes who have achieved") that were evaluated twice. The first portion of the survey measures frequency. Participants evaluated their parent/guardian's frequency-of-use of each technique via a 5-point, Likert-type scale with 1 representing *never*, 3 indicating *sometimes*, and 5 signifying *often*. The second portion of the survey measured effectiveness, prompting participants to assess the techniques' effectiveness in enhancing their self-efficacy via a 5-point, Likert-type scale with 1 representing *not effective*, 3 signifying *somewhat effective*, and 5 signifying *very effective*.

Chapter 4

Results

Statistical Analyses

Bivariate correlations among the independent and dependent variables are listed in Table 1. Variables correlated in hypothesized relationships used one-tailed significance tests. All other correlations used two-tailed. Conversation-oriented scores were positively related to student-athlete self-efficacy ($r = .101$, $p < .05$). Conformity-oriented scores were negatively related to student-athlete self-efficacy ($r = -.337$, $p < .01$).

Table 1 Correlations among Independent and Dependent Variables

Variables	1	2	3	4
1. Conformity-Orientation	---			
2. Conversation-Orientation	**-.140****	---		
3. Self-Efficacy	**-.337****	**.101***	----	
4. Gender	-.042	.015	.036	----

Note. One-tailed correlations represent hypothesized relationship (conformity- and conversation-orientations with self-efficacy). Two-tailed correlations are reported for all other cases.
Significant at the ** $p < .01$ levels and * $p < .05$.

Hypothesis Tests

Prior to examining the hypotheses, tests were conducted to determine whether gender might be a confounding variable. Some studies have found that males report their families to administer higher levels of conformity-oriented communication than females. In contrast,

females report families to employ higher levels of conversation-oriented communication than male family members (Fitzpatrick & Ritchie, 1994). Later research supplemented earlier findings by demonstrating that families with sons are more likely to implement conformity-oriented communication than families with daughters (Koerner & Fitzpatrick, 2002a). However, more recent studies have found inconsistent results for sex differences given that more females are participating in sport due to Title IX (Anderson, Funk, Elliott, & Smith, 2003). Therefore, we examined whether gender (coded 0 = male, 1 = female) was correlated with our independent and dependent variables. The correlations in Table 1 indicate that gender was not significantly or strongly associated with the reported parent(s)/guardian(s) communication orientation score or the student-athlete's self-efficacy. Therefore, it was not controlled for in the analyses.

Regression and analysis of variance were used to test the hypotheses and research questions. For each analysis, the alpha was set to $p < .01$ to reduce the likelihood of making a Type I error (Cohen & Cohen, 1983). The hypotheses predicted opposing correlations for conversation- and conformity-orientated communication. *H1* predicted a positive relation with parent(s)/guardian(s) conversation-orientation with student-athlete self-efficacy. When testing *H1*, conversation-oriented communication did not account for a statistically significant increment of variance, $\Delta R^2 = .01$, $\Delta F(1, 277) = 2.86$, $p = .092$. Therefore, a parent(s)/guardian(s) conversation communication orientation does not positively relate to self-efficacy, B = .08, $t(276) = 1.69$, $p = .09$.

In contrast, *H2* predicted a negative relationship between a parent(s)/guardian(s) conformity-oriented communication and student-athlete self-efficacy. When testing *H2*, conformity-oriented communication accounted for a statistically significant increment of variance, $\Delta R^2 = .114$, $\Delta F(1, 281) = 35.92$, $p < .001$; and the relation was negative, B = -.32,

t(280) = -5.99, $p < .001$. Thus, 11.4% of variability of self-efficacy can be explained by conformity-orientation. The results from the regression to test the hypotheses are listed in Table 2. Support was found for *H2*. That is, there was a negative relationship between a parent/guardian's perceived use of conformity-oriented communication and student-athlete's self-efficacy. Conversation-oriented communication was not significantly related to student-athlete self-efficacy.

Table 2 Summary of Regressions Predicting Student-Athlete Self-Efficacy

Variables	R^2	F	ß	B
Self-Efficacy	.011	2.86		
Conversation-Orientation			.101	.082
Self-Efficacy	.114	**35.92*** **		
Conformity-Orientation			**-.337*** **	**-.319*** **

Note. Significant at the *** $p < .001$ levels.

Research Questions

RQ1 examined whether a parent(s)/guardian(s) conformity- and conversation-orientation interact to influence student-athlete self-efficacy. Median splits for conformity-orientation (CF) (median = 21) and conversation-orientation (CN) (median = 60) were used to develop four groups: High CN/High CF ($n = 55$), Low CN/Low CF ($n = 59$), High CN/ Low CF ($n = 82$), Low CN/High CF ($n = 81$).

An ANOVA examined the interaction of conformity- and conversation-orientations on student-athlete self-efficacy and was not significant, F(1, 277) = 1.69, p = .195. However, both main effects were significant, conformity-oriented communication, F(1, 277) = 21.06, p < .001

and conversation-oriented communication, F(1, 277) = 4.76, p = .030. A student-athlete's perception that their parent(s)/guardian(s) use higher levels of conversation-oriented communication positively impacts his or her self-efficacy. In contrast, a student-athlete's perception that their parent(s)/guardian(s) use higher levels of conformity-oriented communication negatively impacts their self-efficacy.

Table 3 contains the mean scores of self-efficacy for each group and notes significant differences. The self-efficacy of the student-athlete's in the High CN/Low CF significantly differed from that of those in the Low CN/High CF (M = 6.69; SD = 1.27) and High CN/High CF (M = 5.82; SD = 1.41) groups.

Table 3 Interaction Means for Conformity- and Conversation with Self-Efficacy

Variables	*n*	Self-Efficacy
High CN/High CF	55	$66.67(10.08)_a$
Low CN/Low CF	59	69.05(6.60)
High CN/Low CF	82	$72.49(7.83)_{ab}$
Low CN/High CF	81	$65.80(7.79)_b$

Note. Numbers in parentheses are standard deviations. Means with the same subscripts are significantly different. Significance tests at $p < .01$. Due to missing data, $N = 276$.

RQ2 examined the athlete's report of their parent(s)/guardian(s) use of the 13 efficacy-enhancing techniques. Table 4 contains the frequency-of-use ratings for the 13 self-efficacy strategies. Results reveals that the strategies which received the highest mean usage ratings reported by the student-athletes in regard to their parent(s)/guardian(s) employment of each technique are as follows: encouraging positive talk, the parent(s)/guardian(s) acting confident themselves, helping the athlete to imagine sport performance success, and encouraging hard

physical conditioning. Techniques judged to be used least frequently by the parent(s)/guardian(s) were as follows: emphasizing lack of effort, not lack of ability, for failure, relaxation training, instruction drilling, and reward statements.

Table 4 Frequency-of-Use Ratings of Self-Efficacy Enhancing Strategies

Efficacy Strategies	Rank	Mean	Std. Deviation
Encourage positive talk	1	4.17	.900
Parent acting confident in self	2	4.17	.761
Imagine success	3	3.49	1.135
Encourage hard physical conditioning	4	3.26	1.187
Set specific goals	5	3.06	1.196
Emphasize technique improvement, downplay outcome	6	3.00	1.204
Emphasize that anxiety is not fear but readiness	7	2.89	1.244
Verbally persuade	8	2.88	1.137
Identify similar others who have achieved	9	2.84	1.272
Reward statements	10	2.60	1.245
Instruction-drilling	11	2.48	1.192
Reduce anxiety via relaxation training	12	2.40	1.308
Emphasize lack of effort, not lack of ability, for failure	13	2.18	1.248

Note. Frequency-of-use ratings were made on Likert scales, with 1=never and 5 = often.

RQ3 examined the effectiveness of the 13 self-efficacy enhancing techniques reported by the athlete as administered by the parent(s)/guardian(s). Table 5 reveals the following techniques to be reported as most effective efficacy-enhancing techniques when administered by the parent(s)/guardian(s): encouraging positive talk, the parent(s)/guardian(s) acting confident in themselves, helping the athlete to imagine sport performance success, and helping to set sport specific goals. Strategies judged to be least effective were reported as follows: emphasizing lack

of effort, rather than lack of ability, for failure, instruction drilling, verbal persuasion, and identifying similar others who have achieved.

Table 5 Effectiveness Ratings of Self-Efficacy Enhancing Strategies

Efficacy Strategies	Rank	Mean	Std. Deviation
Encourage positive talk	1	4.09	.874
Parent acting confident in self	2	3.87	.909
Imagine success	3	3.75	1.052
Set specific goals	4	3.59	1.038
Emphasize that anxiety is not fear but readiness	5	3.30	1.233
Encourage hard physical conditioning	6	3.25	1.076
Emphasize technique improvement, downplay outcome	7	3.16	1.115
Reduce anxiety via relaxation training	8	3.07	1.266
Reward statements	9	3.06	1.237
Identify similar others who have achieved	10	2.93	1.186
Verbally persuade	11	2.88	1.123
Instruction drilling	12	2.65	1.139
Emphasize lack of effort, not lack of ability, for failure	13	2.38	1.266

Note. Effectiveness ratings were made on Likert scales, with 1 = not effective and 5 = very effective.

RQ4 examined the association between conformity- and conversation-orientated parent(s)/guardian(s) communication and their use of efficacy-enhancing techniques. Table 6 reports the correlations between conversation- and conformity-orientated parent(s)/guardian(s) communication and the use of the 13 self-efficacy enhancing techniques. This table is organized in the order of frequency-of-use rankings with the effectiveness ratings provided. For conversation-oriented communication (*RQ4a*), the correlation reveals a positive significant relationship with all the 13 efficacy enhancing techniques excluding emphasizing lack of effort,

rather than ability, for failures. Of the correlated relationship between efficacy-enhancing techniques and conversation-oriented communication, a parent(s)/guardian(s) encouraging positive talk and helping the athlete to imagine success demonstrate large effect sizes. The techniques reporting a medium effect size are as follows: the parent(s)/guardian(s) helping the student-athlete to reduce anxiety via relaxation training, helping the athlete to set specific sport goals, emphasizing that anxiety is not fear but readiness, and emphasizing technique improvement while downplaying sport outcome.

For conformity-oriented communication (*RQ4b*), the correlation reveals a significant relationship with the 13 efficacy-enhancing techniques excluding the following four: the parent(s)/guardian(s) acting confident in themselves, helping the athlete to imagine success, emphasizing that anxiety is not fear but readiness, and helping to reduce athlete anxiety via relaxation training. Of the significant relationships reported, all were demonstrated as positive relationships with the exception of a negative relationship between the efficacy-enhancing strategy of the parent(s)/guardian(s) encouraging positive talk.

Table 6 Correlations between Conversation- & Conformity- Orientation and Use of Techniques.

Efficacy strategies	Rank Order of Effectiveness	Conversation Orientation	Conformity Orientation
1. Encourage positive talk	1	**.648****	**-.189****
2. Parent acting confident in self	2	**.289****	-.034
3. Imagine success	3	**.517****	-.014
4. Encourage hard physical conditioning	6	**.254****	**.218****
5. Set specific sport goals	4	**.383****	**.205****
6. Emphasize technique improvement, downplay outcome	7	**.313****	**.181****
7. Emphasize that anxiety is not fear but readiness	5	**.335****	.092
8. Verbally persuade	11	**.248****	**.370****
9. Identify similar others who have achieved	10	**.125***	**.386****
10. Reward statements	9	**.268****	**.194****
11. Instruction-drilling	12	**.233****	**.322****
12. Reduce anxiety via relaxation training	8	**.418****	.158**
13. Emphasize lack of effort, not lack of ability, for failure	13	-.012	**.407****

Note. Table is organized in the order of frequency-of-use rankings with the effectiveness ratings provided. Significant at the * $p < .05$ and ** $p < .01$

Chapter 5

Discussion

The present study extends knowledge within two areas of research: self-efficacy and family communication. Within both bodies of literature, this study answers the call for research to expand investigations of the influences on student-athlete self-efficacy into relational contexts beyond the coach-athlete relationship (e.g., Collins & Durand-Bush, 2014; Mouratidis, Lens, & Vansteenkiste, 2010). The present study accomplishes this in two ways: (1) by examining the association between family communication patterns and self-efficacy and (2) by examining the frequency and effectiveness of efficacy-enhancing techniques utilized by parent(s)/guardian(s). In regard to the family communication literature, the present study extended research on family communication patterns (e.g, Koerner & Fitzpatrick, 2002a) by arguing parent(s)/guardian(s) conversation- and conformity-oriented communication would have opposing influences on student-athlete self-efficacy. A parent(s)/guardian(s) use of conversation-oriented communication positively influences a student-athlete's self-efficacy, while conformity-oriented communication would yield negative influences. In regard to the self-efficacy literature, the present study extended research on efficacy-enhancing techniques (Gould et al., 1989; Vargas-Tonsing et al., 2004) by presenting the frequency-of-use and effectiveness ratings for the 13 techniques and associating them with the communication orientations.

Communication Orientations and Self-Efficacy

Although previous research has consistently shown conversation- and conformity-oriented communication to interact with one another across contexts (e.g., Baxter & Clark, 1996; Fitzpatrick, Marshall, Leutwiler & Kremar, 1996; Koerner, 1995; Koerner & Cvancara, 2002; Koerner & Fitzpatrick, 1997), they did not interact to influence a student-athlete's self-efficacy.

This finding suggests that families who administer reasoning communication (conversation-oriented tendencies) about demanded conformity to family decisions/value/beliefs still under shadow the coercive effects of conformity-oriented communication. That is, when a parent(s)/guardian(s) give rational justifications for the decisions in which they are demanding compliance from their offspring, levels of self-efficacy are not vulnerable to change when high levels of conformity-oriented communication is present regardless the level of conversation-oriented communication present. Practical implications suggest that parent(s)/guardian(s) cannot simply add conversation-oriented communication to the already present conformity-oriented communication to promote positive changes to self-efficacy; but rather, the parent(s)/guardian(s) should be more concerned with decreased use of conformity-oriented communication as it separately affects student-athlete self-efficacy.

However, both conversation- and conformity-orientations demonstrate main effect scores with notably pertinent differences between the mean scores of the High CN/Low CF and Low CN/High CF groups and the High CN/Low CF and High CN/High CF groups. These results suggest important implications for practical use. That is, a larger difference in mean scores was reported for the High CN/Low CF and Low CN/High CF groups when compared to the mean differences scores between the High CN/Low CF and High CN/High CF groups. These findings suggest that with any increase in conformity-oriented communication yields a larger impact on student-athlete self-efficacy. In contrast, there is a smaller impact on student-athlete self-efficacy when high levels or increases in conversation-oriented communication are presented by the parent(s)/guardian(s). The mean differences suggest conformity-oriented communication is the driving force on self-efficacy levels. This can be explained from the results that conformity-

oriented communication is a stronger predictor of student-athlete self-efficacy, accounting for 11.4% of the variance.

Families high in conformity-oriented communication hold a higher concern for the family unit as a whole rather than the individual family members. This suggests that the coercive communication of conformity-oriented families possess a stronger concern for the development of the family unit's self-efficacy rather than the individual's level of self-efficacy. This is not to imply that conformity-oriented families are not concerned with the student-athlete's level of self-efficacy, but rather that these families emphasize the homogeneity of beliefs to reflect that of the family unit rather than the individual. Thus, student-athletes deriving from dominantly conformity-oriented families may tend to report levels of self-efficacy reflective of the family unit rather than the individual. That is, families with higher levels of conformity-oriented communication will predict levels of self-efficacy given that other environmental factors are not encouraged by the family unit as they could be detrimental to the harmonious hierarchy of the family. In turn, external relationships outside the family unit will not have a large impact on the cognitive appraisal of the student-athlete's self-efficacy.

In contrast, conversation-oriented communication demonstrated a positively significant correlation with self-efficacy; however, it did not predict student-athlete self-efficacy. The findings can be demonstrated given the difference in mean scores. That is, the mean differences between both high conversation-oriented communication groups was smaller than the mean difference between high to low conversation groups. This finding can be interpreted given how conversation-orientation is conceptualized within the family communication pattern literature. Family members in higher conversation-oriented families encounter more encouraging communication that promotes external relationship outside of the family unit. Children deriving

from a conversation-oriented family learn independence apart from the family unit by developing confidence in their decision-making skills (Koerner & Fitzpatrick, 2002a). This can be due to the level of analysis in which the variable of self-efficacy is reported. That is, individuals cognitively appraise self-efficacy determined by their environment. Within a family with higher levels of conversation-oriented communication, an individual has more autonomy to appraise his/her level of self-efficacy from other factors in the environment, external the family unit. Thus, conversation-oriented communication, as administered by the parent(s)/guardian(s), might not show predictive power on self-efficacy given other environmental factors that affect the dependent variable

In line with self-efficacy literature, an individual's mastery experience, vicarious experience, verbal persuasion and physiological and emotional states hinge upon the individual's environment (Bandura, 1989; Feltz, Short, Sullivan, 2008). Previous research states that autonomy-supportive communication from the coach positively associated with an athlete's self-efficacy while coaches who engage in unsupportive communication produce negative influences on an athlete's performance (Feltz, Short, & Sullivan, 2008). Given the present study's results, the same implications can be drawn within the parent-athlete relationship. When controlling communication is implemented (conformity-orientation), self-efficacy is at risk. When parent(s)/guardian(s) implement positive, autonomy-supportive communication (conversation-orientation), positive relations are associated with student-athlete self-efficacy. Practical implications suggests for parent(s)/guardian(s) to be aware of the type of communication they employ with their student-athlete, making attempts to decrease use of conformity-oriented communication in order to avoid negative effects on the student-athletes self-efficacy.

To provide a specific example, the self-efficacy literature states that individuals are likely to experience higher levels of self-efficacy when the task is attempted without assistance from others (Bandura, 1997). Considering the controlling and persuasive tendencies of the conformity-oriented family, various sport tasks would likely be assisted by the parent(s)/guardian(s) resulting in lower levels of developed self-efficacy by the student-athlete. That is, parent(s)/guardian(s) that do not refrain from excessively providing specific sport technical assistance are putting their athletes at risk of self-efficacy deficiencies. Practical implications imply that parent(s)/guardian(s) should refrain from excessive administration of assistance within the student-athlete's sport, allowing the student-athlete to experience more autonomy with his/her efficacy development. Likewise, parent(s)/guardian(s) should strive to place their student-athlete in a sport environment that is challenging without being too difficult for the athlete to experience athletic success. The intention behind this action is to provide the student-athlete with opportunities to gain mastery experience, repeated success toward a challenging sport task will likely result in increases in self-efficacy beliefs (Feltz, Short, & Sullivan, 2008).

Efficacy-Enhancing Techniques

This present study also extended the research of Gould et al. (1989) and Vargas-Tonsing et al. (2004) on efficacy enhancing techniques. Their previous research investigated self-efficacy enhancing techniques' frequency-of-use and effectiveness as administered by the coach, but reported from the perspective of the coach (Gould et al., 1989) and the athlete (Vargas-Tonsing et al., 2004). The present study extends this research to include the parent(s)/guardian(s) frequency-of-use and effectiveness as reported by the student-athlete. Results reveal an interesting finding when juxtaposed with previous research. The coach-athlete relationship demonstrates that the efficacy-enhancing technique of instruction drilling was reported with

higher frequency-of-use and effectiveness mean scores (Gould et al., 1989; Vargas-Tonsing et al., 2004). The opposite was reported when considering the parent-athlete relationship. Instruction drilling was reported as one of the least used and ineffective strategies when administered by the parent(s)/guardian(s). This result can be explained given the differences in relational functions and settings between the triangulated relationships between the coach, parent(s), and athlete. Dominantly, the coach's role largely encompasses higher levels of instruction drilling than the role of the parent. The coaches' use of instruction drilling can be explained by the environmental differences in which each relationship (i.e., coach-athlete, parent-athlete) is encompassed. The technique of instruction drilling is most commonly administered in the practice setting, the dominant environment for the coach-athlete relationship. Since the parent(s)/guardian(s) are not commonly found in the practice setting, instruction drilling would not be expected as a frequently used or effective strategy from the parent(s)/guardian(s), as was the result of this study. However, this reported difference between the coach's and parent's use-of and effectiveness of efficacy-enhancing techniques provides implications for role distinction. Overall, parent(s)/guardian(s) should refrain from administering ineffective efficacy-enhancing techniques while simultaneously striving to administer those techniques that demonstrate benefits to the student-athlete's self-efficacy.

Lastly, *RQ4* examined the relationship between conformity- and conversation-oriented communication and the 13 self-efficacy enhancing techniques. Results reveal that associations between both orientations and efficacy-enhancing techniques coincide with family communication literature. The strategies demonstrating a stronger relation to conformity-oriented communication (i.e., verbal persuasion, emphasizing lack of effort, not lack of ability, for failure, and identifying similar others who have achieved) coincide with the characteristics of family

types that are higher in conformity-oriented communication. That is, families higher in conformity-oriented communication (protective and pluralistic families) show higher levels of persuasiveness (Koerner & Fitzpatrick, 2002a), a dominant information source that influences efficacy appraisal (Bandura, 1977; 1997). Likewise, the strategies demonstrating a stronger relation to conversation-oriented communication (i.e., Parent(s)/guardian(s) acting confident in themselves, helping the student-athlete to set specific sport goals, emphasizing that anxiety is not fear but readiness) coincide with the characteristics of family types that are higher in conversation-oriented communication. Conversation-oriented communication (consensual and pluralistic families) is more likely to engage in open communication with family members. In order for the aforementioned strategies to demonstrate effectiveness, more frequent and open communication is required. That is, the parent(s)/guardian(s) would need to engage in more frequent communication with the athlete to determine what specific sport goals need to be set, to encourage positive talk, or to help the student-athlete imagine success.

Given these correlated results, prominent differences are noted between conversation- and conformity-orientations. That is, the strategies that significantly correlated with conversation-oriented communication were more concerned with the internal affairs of the student-athlete (i.e. personal student-athlete goals for his/her sport, helping the student-athlete to personally imagine him/herself accomplishing success). In contrast, conformity-oriented communication significantly correlated with the efficacy-enhancing techniques that involved external factors to help the student-athlete enhance his/her level of self-efficacy (i.e. comparing the student-athlete to similar others, verbally persuade the student-athlete's appraisal of efficacy). This is an interesting finding given the conceptualization of conformity-oriented communication. Conformity-oriented families do not encourage relationships external to the

family unit. When the parent(s)/guardian(s) of conformity-oriented families are comparing the student-athlete to similar others, this would suggest and assume that family members are referencing similar others external the family, which is uncharacteristic. Future research is later suggested to further investigate this finding.

Although previous scholars have examined self-efficacy in the context of sport, they have noted the need for future studies to explore the unique influence of parent(s)/guardian(s) as the parent-athlete relational dyad operates in a dynamic relational environment in which student-athletes juggle multiple relationships while engaging in sport (i.e., coach-athlete, teammate-athlete, and parent-athlete). Previous research has explored the coach-athlete relationship in great detail and more broadly explored the teammate-athlete relationship; however, little research has been done within the parent-athlete relationship. The present study explores the need for parent-athlete literature while also offering new insight into the specific communicative differences into how conversation- and conformity-orientations affect self-efficacy. In general, these findings offer practical implications for parent(s)/guardian(s) of student-athletes. Given the larger impact of conformity-oriented communication on student-athlete self-efficacy, parent(s)/guardian(s) should evaluate the type of communication they administer with their student-athlete. If conformity-oriented communication tendencies are present, parent(s)/guardian(s) should focus on decreasing their controlling communication by implementing more positive talk that concerns the individual growth of the student-athlete while disregarding how the individual growth of the student-athlete conforms to the family unit.

In regard to the efficacy-enhancing techniques, previous research has explored the coaches' use-of and effectiveness of the 13 techniques from the perspective of the coach and athlete; however, no research has examined the parent(s)/guardian(s) use-of and effectiveness of

the strategies. This investigation provided new insight into the specific efficacy-enhancing techniques that parent(s)/guardian(s) are using and deemed most effective. Juxtaposing the results with previous research, new insight offers differences in the type of techniques reported as most effective from the parent(s)/guardian(s). The technique of instruction drilling has been reported as one of the most effective techniques administered by the coach. Conversely, instruction drilling was reported as one of the least effective techniques administered by parent(s)/guardian(s). This novel information provides understandings into the differing roles of the coach and parent(s)/guardian(s) in relation to the student-athlete. In light of both self-efficacy and family communication, the aforementioned results offer new knowledge into both fields of communication studies and sport psychology.

Limitations and Directions for Future Research

Despite these contributions and insights, this study is not without limitations. The median splits for conformity (median = 21) and conversation (median = 60) were vastly different and indicated high levels of conversation-orientation across the sample. Largely, previous research significantly differs from the findings presented in this study. That is, previous research demonstrates more normality per each orientation's scale (Baxter & Clark, 1996; Fitzpatrick, Marshall, Leutwiler & Kremar, 1996; Koerner, 1995; Koerner & Cvancara, 2002; Koerner & Fitzpatrick, 1997). A possible reason for the overrepresentation of conversation-oriented communication and underrepresented of conformity-oriented communication might be due to the vastly different demographic results between sexes. That is, this study's sample was overwhelming female. Previous research states that individual's perceptions of their families depend, in part, on their own family role (Fitzpatrick & Ritchie, 1994). That is, sons report their families to be higher in conformity-oriented communication than females. Likewise, females

report their families to be higher in conversation-orientations. With a better-represented sample of male student-athletes, the communication orientations might, too, be better represented. Future research should strive to gather data that equally embodies both sexes and communication orientations. Given a better representation of conformity-orientated communication, an interaction between the two orientations might demonstrate an influence on self-efficacy. Additionally, further investigation into this line of research might also allow for possible implications to be made from the family type literature, given that the four family types are better represented by the data. That is, the family types that are either high or low in conformity- and conversation-orientations might help to explain how parent(s)/guardian(s) communication affects student-athlete self-efficacy.

In line with previous suggestions for future research, additional investigations should consider family composition particularly with respect to the former/current athletic participation status of other family members. If the family is composed of several athletes who have demonstrated sport success, will this determine the effect to which the conformity-oriented family will correlate with the efficacy-enhancing technique of similar others? Likewise, a family composed of non-athletes might present different results considering that the parent(s)/guardian(s) might have no implementing knowledge of a particular technique (i.e. how to use instruction drilling, what type of hard physical conditioning to employ). Additionally, future research should have the student-athlete report a specific parent/guardian in which they are contemplating while completing the questionnaire. This information will inform future research as to the difference between male and female parent(s)/guardian(s) with the type of communication orientations they employ and the types of techniques they use. Considering the family composition of previous and/or current athletes and sex of the parent(s)/guardian(s) might

provide new insight into the effects of parent(s)/guardian(s) communication and behaviors on student-athlete self-efficacy.

Lastly, the present study's results indicate that instruction drilling in not a practical efficacy-enhancing technique in the parent-athlete relationship, which contrasts with the results reported for the coach-athlete relationship. If instruction drilling is administered by the parent(s)/guardian(s), a possible strain in the triangulated relationship could result. Future research should further investigate the tension that might arise when parent(s)/guardian(s) administer efficacy-enhancing techniques that are least effective in the context of the parent-athlete relationship, but most effective in the coach-athlete relationship. That is, when parent(s)/guardian(s) are administering efficacy-enhancing techniques that are reported least effective, how does it interact to influence the other sport related relationships? (i.e. When a parent(s)/guardian(s) administers the efficacy-enhancing technique of instruction drilling, does it hinder the effectiveness of instruction drilling as administered by the coach?). Future research should consider this line of investigation to add to the literature helping to distinguish between coach/parent roles in sport as each relationship relates to the student-athlete.

Conclusions

Self-efficacy literature has provided implications for sport performance (e.g., Moritz et al., 2000) where the coach-athlete relationship has been the dominant context of exploration. Potential implications of the parent-athlete interactions in regard to the student-athlete's sport performance make continued efforts to refine understanding of the communicative factors that influence this important area of research. Due to the predictive effects of self-efficacy with the student-athlete's sport performance, understanding factors that affect self-efficacy is important. The present study contributes to sport psychology literature by extending the research to the

influence of communication in the parent-athlete relationship on self-efficacy. Additionally, this research contributes to communication literature by demonstrating the effects of family communication orientations on student-athlete self-efficacy and identifying specific communicative behaviors that impact efficacy enhancement. In addition to contributing to the research literature, the results of the present study also identify opportunities for instructional practice through which coaches and parent(s)/guardians(s) can be equipped with the knowledge to facilitate an optimal sport performance environment for the athlete.

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Appendices

Appendix A: Informed Consent Statement

The University of Tennessee

College of Communication and Information

Communication Studies Department
INFORMED CONSENT FORM

Project Title: Parent Communication and Student-Athlete Self-Efficacy
Principle Investigator: Dr. Courtney N. Wright
Co-Investigator: Sara Erdner

Thank you for your interest in this research study in which you are invited to participate. The goal of this inquiry is to enhance understanding of the association between parent communication and athlete self-efficacy toward his or her particular sport. Please read the following information carefully before continuing to the survey.

PROCEDURES: You will be asked to answer a series of questions. Please read each question completely and provide the answer that best describes your views. This survey should take approximately 10-15 minutes to complete. Once you have answered the questions presented on each page, look for a "Continue to next page" or "Next page" Internet link to bring you to the next set or page of questions. You may also choose to return to a previous question page by clicking the "Back" or "Previous page" link.

RISKS: There are no foreseeable risks of participating in this study and these are no greater than those encountered in everyday life. The types of questions in this survey are commonly used in communication research without harm. If some of the questions in this study are found to be upsetting or cause discomfort, you may skip the question(s) and go on to the next question or you can terminate your participation in the study entirely without penalty.

BENEFITS: The findings of the study will be used to further knowledge and encourage future research in communicative influences on self-efficacy. If you wish to learn more about this topic or the results of the study, you may contact the researcher.

CONFIDENTIALITY: The information in this study and corresponding records will be kept confidential. Data will be stored securely and will be made available only to individuals conducting the study unless participants specifically give permission in writing to do otherwise. No reference will be made in oral or written reports that could link participants to the study. Data will be kept on a secure computer in the office of the lead researcher's advisor, Dr. Courtney Wright, on this project, 293 Communications Building.

CONTACT INFORMATION: Any questions about this study may be directed toward the lead researcher, Sara Erdner at telephone number (256) 783-3772 or email, serdner@vols.utk.edu or

Dr. Courtney Wright at telephone number (865) 974-7066 or email, cwright@utk.edu. If you have questions about your rights as a study participant, contact the Office of Research Compliance Officer at (865) 974-3466, research@utk.edu.

PARTICIPATION: Your participation in this project is voluntary. If you decide to participate, you may withdraw from the study at any time without penalty. If you withdraw from the study before the survey is complete, your data will be destroyed.

Consent:

I am 18 years or older. I agree to participate in the research study described above. By clicking the selections to begin the survey, I agree to the terms above in lieu of a signature. I know whom to contact if I have additional questions. I understand I have the ability to print this consent form for my personal records.

Appendix B: Questionnaire

PART ONE

The following contains statements about parent/guardian communication styles. Please circle a number from 1 to 5 to indicate your level of agreement with each of these statements, with 1 being strongly *disagree* and 5 being strongly *agree*.

1. I can talk with my parent(s)/guardian(s) about my sport performance even if we disagree with one another.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

2. My parent(s)/guardian(s) often say something like "Every member of the family should have some say in my sport performance decisions."
   Strongly Disagree 1 2 3 4 5 Strongly Agree

3. My parent(s)/guardian(s) often ask my opinion when the family is talking about my sport performance.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

4. My parent(s)/guardian(s) encourage me to challenge their ideas and beliefs about my sport performance.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

5. My parent(s)/guardian(s) often say something like "You should always look at both sides of an issue," as it relates to my sport performance.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

6. I usually tell my parent(s)/guardian(s) what I am thinking about my sport performance.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

7. I can tell my parent(s)/guardian(s) almost anything about my sport performance.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

8. I often talk about my feelings and emotions about my sport performance with my parent(s)/guardian(s).
   Strongly Disagree 1 2 3 4 5 Strongly Agree

9. My parent(s)/guardian(s) and I often have long, relaxed conversations about my sport performance.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

10. I really enjoy talking with my parent(s)/guardian(s) about my sport performance, even when we disagree.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

11. My parent(s)/guardian(s) encourage me to express my feelings about my sport performance.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

12. My parent(s)/guardian(s) tend to be very open about their emotions about my sport performance.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

13. I often talk with my parent(s)/guardian(s) about things related to my sport performance that I have done during the day.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

14. With my parent(s)/guardian(s), I often talk about my sport performance plans and hope for the future.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

15. My parent(s)/guardian(s) like to hear my opinion about my sport performance, even when I do not agree with them.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

16. When anything really important is involved as it relates to my sport performance, my parent(s)/guardian(s) expect me to obey without question.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

17. In our home, my parent(s)/guardian(s) usually have the last word when making decisions about my sport performance.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

18. My parent(s)/guardian(s) feel that it is important to have a boss in the family that determines my sport performance.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

19. My parent(s)/guardian(s) sometimes become irritated with my views about my sport performance if they are different from theirs.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

20. If my parent(s)/guardian(s) do not approve of sport performance decisions, they do not want to know about it.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

21. When I am at home, I am expected to obey my parent(s)/guardian(s)' rules as they relate to my sport performance.
Strongly Disagree *1* *2* *3* *4* *5* *Strongly Agree*

22. My parent(s)/guardian(s) often say things like, "You'll know better when you grow up," as it relates to my sport performance.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

23. My parent(s)/guardian(s) often say things like, "My ideas about your sport performance are right and you should not question them."
    Strongly Disagree 1 2 3 4 5 Strongly Agree

24. My parent(s)/guardian(s) often say things like, "A child should not argue with adults," as it relates to my sport performance.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

25. My parent(s)/guardian(s) often say things like, "There are some things that just shouldn't be talked about," as it relates to my sport performance.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

26. My parent(s)/guardian(s) often say things like, "You should give in on sport performance arguments rather than risking making people mad."
    Strongly Disagree 1 2 3 4 5 Strongly Agree

PART TWO

Self-efficacy is your perceived ability to execute and control a particular sport-related task to attain a specific sport-related goal (Bandura, 1977; 1997; Feltz, Short, & Sullivan, 2008; Rodgers & Murray, 2007).

The following contains statements about your personal level of self-efficacy toward your sport. Indicate how often each statement is true for **you** by circling the appropriate number below each statement. Please circle a number from 1 to 5 to indicate your level of agreement with each of these statements, with 1 being strongly *disagree* and 5 being strongly *agree*.

General Self-Efficacy Scale

1. When I make sport performance plans, I am certain I can make them work.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

2. One of my sport performance problems is that I cannot get down to work when I should.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

3. If I can't do a sport specific skill the first time, I keep trying until I can.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

4. When I set important sport performance goals for myself, I rarely achieve them.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

5. I give up on my sport performance goals before completing them.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

6. I avoid facing difficult sport performances.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

7. If a sport performance looks too complicated, I will not even bother to try it.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

8. When I have an unpleasant athletic skill to perform, I stick to it until I finish it.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

9. When I decide do a specific sport related skill, I go right to work on it.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

10. When trying to learn a new sport related skill, I soon give up if I am not initially successful.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

11. When unexpected sport performance problems occur, I don't handle them well.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

12. I avoid trying to learn new sport related skills when they look too difficult for me.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

13. Failure in my sport just makes me try harder.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

14. I feel insecure about my athletic ability.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

15. I am a self-reliant person as it related to my sport performance.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

16. I give up easily in my sport.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

17. I do not seem capable of dealing with most problems that come up in life.
    Strongly Disagree 1 2 3 4 5 Strongly Agree

PART THREE

Please indicate the FREQUENCY with which your parent(s)/guardian(s) engage in the following statements in reference to your **sport participation/performance**. Please circle a number from 1 to 5 with 1 signifying *never*, 3 indicating *sometimes*, and 5 signifying *often*.

1. My parent(s)/guardian(s) act confident.
   Never 1 2 3 4 5 *Often*

2. My parent(s)/guardian(s) try to enhance my sport performance through instruction drilling.
   Never 1 2 3 4 5 *Often*

3. My parent(s)/guardian(s) help me set specific sport performance goals.
   Never 1 2 3 4 5 *Often*

4. My parent(s)/guardian(s) encourage positive talk about my sport performance.
   Never 1 2 3 4 5 *Often*

5. My parent(s)/guardian(s) verbally persuade me as it relates to my sport performance.
   Never 1 2 3 4 5 *Often*

6. My parent(s)/guardian(s) emphasize my lack of effort, not lack of ability, for failure when referencing my sport performance.
   Never 1 2 3 4 5 *Often*

7. My parent(s)/guardian(s) emphasize technique improvement, rather than downplay outcome in my sport.
   Never 1 2 3 4 5 *Often*

8. My parent(s)/guardian(s) encourage me to use hard physical conditioning in my sport.
   Never 1 2 3 4 5 *Often*

9. My parent(s)/guardian(s) identify similar athletes who have achieved sport performance as comparable to my sport performance.
   Never 1 2 3 4 5 *Often*

10. My parent(s)/guardian(s) frequently use reward statements when referencing my sport performance.
    Never 1 2 3 4 5 *Often*

11. My parent(s)/guardian(s) help me to imagine my sport performance success.
    Never 1 2 3 4 5 *Often*

12. My parent(s)/guardian(s) emphasize that anxiety is not fear but readiness as it relates to my sport performance.
    Never 1 2 3 4 5 *Often*

13. My parent(s)/guardian(s) help me reduce sport performance anxiety through relaxation training.

Never 1 2 3 4 5 *Often*

PART FOUR

Please indicate how EFFECTIVE the following techniques are at enhancing your self-efficacy in reference to your **sport participation/performance**. Please circle a number from 1 to 5 to indicate the technique's effectiveness, with 1 representing *not effective*, 3 indicating *somewhat effective*, and 5 *very effective*.

1. My parent(s)/guardian(s) acting confident.
   Not Effective 1 2 3 4 5 *Very Effective*

2. My parent(s)/guardian(s) trying to enhance my sport performance through instruction drilling.
   Not Effective 1 2 3 4 5 *Very Effective*

3. My parent(s)/guardian(s) helping me set specific sport performance goals.
   Not Effective 1 2 3 4 5 *Very Effective*

4. My parent(s)/guardian(s) encouraging positive talk about my sport performance.
   Not Effective 1 2 3 4 5 *Very Effective*

5. My parent(s)/guardian(s) verbally persuade me as it relates to my sport performance.
   Not Effective 1 2 3 4 5 *Very Effective*

6. My parent(s)/guardian(s) emphasizing my lack of effort, not lack of ability, for failure when referencing my sport performance.
   Not Effective 1 2 3 4 5 *Very Effective*

7. My parent(s)/guardian(s) emphasizing technique improvement, rather than downplay outcome in my sport.
   Not Effective 1 2 3 4 5 *Very Effective*

8. My parent(s)/guardian(s) encourage me to use hard physical conditioning in my sport.
   Not Effective 1 2 3 4 5 *Very Effective*

9. My parent(s)/guardian(s) identify similar athletes who have achieved sport performance as comparable to my sport performance.
   Not Effective 1 2 3 4 5 *Very Effective*

10. My parent(s)/guardian(s) frequently use reward statements when referencing my sport performance.
    Not Effective 1 2 3 4 5 *Very Effective*

11. My parent(s)/guardian(s) help me to imagine my sport performance success.

Not Effective 1 2 3 4 5 *Very Effective*

12. My parent(s)/guardian(s) emphasize that anxiety is not fear but readiness as it relates to my sport performance.
Not Effective 1 2 3 4 5 *Very Effective*

13. My parent(s)/guardian(s) helping me reduce sport performance anxiety through relaxation training.
Not Effective 1 2 3 4 5 *Very Effective*

PART FIVE
Please provide the following demographic information.

1. **Biological Sex**: ____ Male
____ Female

2. **Age**: ____

3. **Ethnicity**: ____ Caucasian ____ Hispanic
(*choose one*) ____ African American ____ Pacific Islander
____ Native American ____ Mixed (please specify) _____
____ Asian American ____ Other (please specify) _____

4. **Sport**: ____ Baseball ____ Softball
(*choose one*) ____ Basketball ____ Tennis
____ Cross-Country ____ Track & Field
____ Football ____ Volleyball
____ Soccer ____ Other (please specify) _____

5. **Considering where your home is located, please choose one of the following**:
____ In-state athlete
____ Out-of-state athlete

6. **Please indicate the type of scholarship you are receiving for your sport**.
____ Full scholarship

____ Partial scholarship

____ No scholarship

7. **Proximity of parent(s)/guardian(s) from your athletic institution**:

____ Less than an hour

____ 1-3 hours

____ 3-6 hours

____ 6-10 hours

____ 10+ hours

8. **On the following 5-point scale, please indicate how often your parent(s)/guardian(s) comes to watch you play your sport**.

Never		Occasionally		All the time
1	2	3	4	5

9. **On average, how often do you talk to your parent(s)/guardian(s):**

On the phone:

____ Daily

____ 1-2 times a week

____ 3-4 times a week

____ once a month

By text/email:

____ Daily

____ 1-2 times a week

____ 3-4 times a week

____ once a month

10. **Is your parent(s)/guardian(s) a former athlete? Circle one of the following**: Yes / No

If yes, please indicate what sport. _____

Please indicate at what level your parent(s)/guardian(s) played their particular sport.

____ High School

____ College

_____Professional

11. **Please indicate the division in which your athletic institution is affiliated:**

____ Division I

____ Division II

____ Division III

____ NAIA

Appendix C: Recruitment Email to Coaches

Dear Coach:

The coach-athlete relationship is an important connection to foster throughout the athlete's sport career. Although, it is not the coach alone that shapes an athlete's experiences. The role of the parent/guardian is paramount to consider when determining his or her effect on the athlete's sport performance.

In order to obtain a clearer picture of how parent/guardian communication affects the performance of student-athletes, we are inviting student-athletes to complete a short questionnaire designed to assess the athlete's perception of his or her parent/guardian's communication, use of efficacy enhancing techniques, along with the measure of the athlete's self-efficacy.

The web-based questionnaire we have developed **can be completed in 10 minutes**. The student-athletes' participation is greatly appreciated and their responses will be held in strict confidence. Any publications or presentations resulting from this project will report summary statistics only.

Please forward this email and link to your student-athletes so they can complete the survey. Completion of the survey will constitute your consent to participate.

(*insert link to survey*)

If you have any questions about this study, please email lead researcher Sara Erdner, Communication Studies Master's student at the University of Tennessee (serdner@vols.utk.edu)

Thanks in advance for your thoughtful consideration of this request. We would appreciate your completion of the questionnaire within the next week to 10 days.

Best wishes in the coming year.

VITA

Sara Erdner was born in Huntsville, AL, to the parents of James and Cheryl Erdner. She is the sister of older brother, Joseph Erdner. She attended Lynn Fanning Elementary School in Meridianville, Alabama and continued her education to Meridianville Middle School and Hazel Green High School. After graduation, she headed to Calhoun Community College in Huntsville, Alabama to complete her general education requirements before advancing into her major course concentration at the University of Alabama in Huntsville. Sara graduated from the University of Alabama in Huntsville in December 2012 with a Bachelor of Arts degree in Communication Studies. She continued her pursuit of higher education at the University of Tennessee with her acceptance into the College of Communication and Information with a concentration in Interpersonal Communication. During her time as a Master's student, Sara also acted as a graduate assistant with University Housing as an Assistant Hall Director. Sara graduated with a Masters of Science degree in Communication Studies in May 2015. She is continuing her education with a Doctorate of Philosophy in Sport Psychology and Motor Behavior at the University of Tennessee in Knoxville.